

## Patent claims

- 1. Switching circuit for an electromagnetic source for the generation of acoustic waves,
- 5 characterized in that
  the switching circuit comprises at least one first capacitor (C0, C0') that is
  switched in parallel to at least one series switching circuit made up of a second
  capacitor (C1, C2, C1', C2') and a first valve (D1, D2, D1', D2').
- 2. Switching circuit according to claim 1, characterized in that the first valve is a first diode (D1, D2, D1', D2') or a first diode module.
  - 3. Switching circuit according to claim 1 or 2,
- the first capacitor (C0, C0') can be charged with a greater charging voltage (U<sub>0</sub>, U<sub>0</sub>') than the second capacitor (C1, C2, C1', C2') before a discharge of the first capacitor (C0, C0') and the second capacitor (C1, C2, C1', C2').
- 4. Switching circuit according to any of the claims 1 through 3, characterized in that the first capacitor (C0) can be charged with a first direct voltage source (DC0) and the second capacitor (C1, C2) are charged with a second direct voltage source (DC1, DC2) before the discharge.

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5. Switching circuit according to any of the of the claims 1 through 3, characterized in that the first capacitor (C0') and the second capacitor (C1', C2') can be charged with precisely one direct voltage source (DC), and the direct voltage source (DC) can be switched off from the second capacitor with a switching means (S1, S2) as soon as the second capacitor has achieved its charge voltage.



- 6. Switching circuit according to claim 5, characterized in that the switching means (S1, S2) comprises at least one semiconductor element.
- 7. Switching circuit according to any of the claims 1 through 6, characterized in that the parallel circuit made up of a second capacitor (C1, C2, C1', C2')/first valve (D1, D2, D1', D2') and first capacitor (C0, C0') is switched in parallel to a second valve (D3, D3').
  - 8. Switching circuit according to claim 7, characterized in that the second valve is a second diode (D3, D3') or a second diode module.

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